

ABSTRACT

A method of processing skin surface observation measuring data able to address various sicknesses and reduce an error in sickness detection, and a measuring apparatus requiring no filter with a simple structure. The measuring apparatus comprises a means of applying a white light to a biological surface as a sample, a means of detecting the spectra of the white light reflected off a plurality of positions on the biological surface, a means of plotting the absorbances of the above spectra to a light spectrum multi-dimensional space, a means of subjecting data in the spectrum multi-dimension space obtained from the plurality of positions to multivariate analysis to determine the eigenvectors of at least first, second and third principal components, and a means of projecting data at respective positions in respective eigenvector directions to display their magnitudes on a two-dimension display screen on a gray scale or in colors corresponding to the magnitudes; and a measuring method by the apparatus.